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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/430,973 11/01/99 CARR

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EXAMINER

MCELHENY JR, D

ART UNIT

PAPER NUMBER

2862

DATE MAILED:

04/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/430,973

Applicant(s)

CARR ET AL.

Examiner

Donald E. McElheny, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE # MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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1. The amendment filed March 26, 2001 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The changes to: page 1, second paragraph; page 2, paragraph following "SUMMARY OF THE INVENTION"; page 3, paragraphs 3 and 4 onto page 4. Also, the response is incomplete and may contain additional new matter in that the alleged new drawing figure 5 was not submitted and since even with amendments to the written specification taken into consideration the original specification and requested amendments apparently do not include reference numerals to corresponding portions of figure components for any flowchart steps; and without a reference numerals correspondence between such new figure's components or a proper showing by applicants showing basis for new figure components in the specification as originally filed, the new figure can only be assumed to also include new matter.

An applicant cannot change the state of the prior art or applicant's own invention itself from what is presented on the record as in the originally filed patent application. Any deviation is a change amounting to new matter, no matter whether it was even due to applicant's error in originally filed presentation of the state of the prior art or applicant's own invention.

Applicants have attempted to change the admission on page 1, second paragraph, from admitted state of the art background teachings to "experimental use ... by applicants", which is clearly new matter. Such attempted change in the state of

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admitted prior art is new matter and cannot overcome prior art rejections based upon such admissions.

Applicants have attempted to change, by inappropriate amendment introducing the above new matter, the state of the planter to be "a conventional research plot planter", and thus overcome the 112 insufficient disclosure objection and rejection by alleging the conventional prior art performs what was apparently insufficient in disclosure. However, besides this introducing new matter applicants have provided evidence in any manner that the supposed now admitted prior art can perform to the accuracies required and stated necessary in the 112 rejection. Also, the same amended paragraph now adds new matter and new issue that either the planter trip signal or the controller computer (it is not clear which is intended, or whether both) is "which is also mounted on the conventional research plot planter", as there does not appear to be support for such elsewhere in the specification as originally filed. Take note that whether or not a planter is labeled a "research" or "plot" or "research plot" planter is immaterial since a conventional planter is used wherever one skilled in the art arbitrarily deems they want to use such devices and will inherently do so.

The change to page 3 paragraphs 3 and 4 where applicants change the state of their own "planter 26 of this invention includes" a feature of the conventional prior art is new matter. When one considers applicants' amendment in the same paragraph 3 of addition of the sentence "Research planters with GPS receivers connected to a computer are not heretofore known to be used in research plots or anywhere else."; such even contradicts the earlier attempted change to page 2 alleging and stating the

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exact opposite. Apparently applicants want to change the state of their invention and the prior art to have the best of both worlds, to overcome prior art rejections and overcome insufficient disclosure rejections, when their positions and arguments contradict.

The new matter change on page 3, paragraph 3, is also perplexing in that applicants admit the planter is of "Research planters" yet they "are not heretofore known to be used in research plots"; where else are research planters used if not in research plots or fields? Also, if they are not used "anywhere else", then where? Applicants' amendments and arguments are preposterous and clearly solely for the attempt to overcome objections and rejections in their earnest quest for a patent to be granted.

The amendment to page 3, paragraph 4, with "of this invention", introduces a new matter issue in that these components in the figure 3 were admitted as prior art (hence figure 3 apparently should be so labeled as prior art) yet now applicant appears to be alleging his own invention adds a sensor which is not shown in this conventional prior art; especially since applicants have attributed "research planter" to be a key different choice of their invention as opposed to a standard non-research planter. If this feature is indeed not of the prior art and of applicants' own doing then it is also appears to be insufficiently and non-enabling disclosed, and such should be considered included in the insufficient disclosure rejection given in the last Office action.

Applicant is required to cancel the new matter in the reply to this Office Action.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-5 are again rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art as stated in applicants' own specification as originally filed.

Applicants' specification as originally filed without the addition of new matter states on page 1 that the use of global positioning systems (GPS) were known to be used for identification of plots of farm crops. On page 3 is stated "a conventional farm tractor 24 and a research planter 26 are used", where the prior art "planter 26 includes a computer 28 which is operatively connected by conventional means to a GPS receiver 30 so that as each seed is deposited in the soil of a row, a global position of the planted seed is instantaneously determined." Also is stated that the "research planter 26 can have a sensor (not shown), e.g., a photocell, to monitor the dropping of each seed whereupon a signal is transmitted to the computer 28 or GPS 30 to trigger a location reading to be stored in the memory of the computer. More specifically, when the first plot is manually tripped, the computer 30 (sic?)uses vector information and determines the next tripping location. The computer 30 has a program that allows entry of data as

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to the row length and alley width so that the system could calculate the next plot location from the original planter trip." Note the inconsistency in reference numbering, which applicants' amendment failed to address. Applicants are apparently discussing the features of the admitted well known prior art equipment. If not, then applicants' specification is insufficient to support any operative and adequately disclosed structural embodiments to support any sensor detection structure for each seed dispensed, and also fails to provide any computer program or flowchart to support any invention of their own as far as the admitted use of "the program" of "the computer 30". Since applicants require such structures and programs for their own invention and fail to disclose such features to the degree necessary for any inventive disclosure purposes, then inherently such features must be based upon notoriously well known prior art structures and programs. Which applicants' admissions apparently are so relying upon when discussing prior art components. The written specification continues with additional admissions of the known prior art farming equipment. Thus if applicants' admitted well known prior art farming equipment is that which is being used which already has this supportive equipment for use for such intended purposes, applicants' claims and claimed features appear to state no more than that which must also be what is the admitted prior art being used for its admitted prior art purposes.

Furthermore, it was notoriously well known as GPS was being incorporated into farming practices, such as commonly termed phrases such as Precision Agriculture, or Prescription Farming, that the application of GPS and the accuracy of monitoring any aspect of farming will only be limited by the accuracy that the GPS satellite system

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provides. That accuracy of which was limited by scrambling for military security purposes and which more recently has been removed and opened up for much greater positioning accuracy. The degree of monitoring crop plants is thus an inherent arbitrary choice to the degree one skilled in the art desires to apply the well known GPS techniques of tracking each farm crop as it proceeds from soil preparation, plant/seed planting, plant growth monitoring, and plant harvesting. Such practices, and their associated problems in accuracy, were of such notoriously well known practice in the agricultural fields that no specific prior art is deemed necessary to even be cited to cover and meet such broad claims as the instant application submits, and Official Notice is so given.

2. Claims 1-5 are again rejected under 35 U.S.C. 102(a), (b) & (e) as being clearly anticipated by Nakamura (5,438,817).

The monitoring of the position of planting, maintenance, and harvesting of a crop using GPS positioning techniques, including type of crop at a location and its growth and health conditions, was well known at the time of filing of the instant application.

Applicants' arguments have been considered but not deemed persuasive. The intended use of the GPS controlled device for planting and reaping as far as for "testing" or "research" or "plot" or "plots" is immaterial, as one of ordinary skill will inherently use the device in any type and number of plants/crops fields/plots they have use for.

Applicants argue this reference's device is a rice reaper not used in the same context of a planter applicants' intended use limitations of their own claims. But the reference nevertheless explicitly teaches: that it can be used in other than "reaper" or rice field

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crop use and for other types of fields, crops, or plants, including planting, weeding and harvesting agricultural environment equipment usage; and that the field monitoring data in the database may span more than one season and year; and that the degree of accuracy of monitoring field accurate can be down to the plant location level which permits weeding during plant growth stage of the plot/field. Applicants have selected portions of the reference's teachings to allege differences from their claims while ignoring the reference's teachings as a whole and what those of ordinary skill in the agricultural arts will inherently consider in plant/crop management operations. As the device is moved and used on different fields, or different field sections, or even different crops, the system inherently involves monitoring of the context of what different "plots" are understood within the agricultural community. The remaining arguments either lack support by the claims or met by the explicit or inherent teachings of the reference.

3. The disclosure is again objected to under 35 U.S.C. 112, first paragraph, as being insufficient and non-enabling to support the appended claims.

4. Claims 1-5 are again rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For reasons stated supra regarding new matter, these objections and rejections must be repeated and are not overcome.

The claims amount to stated desired results relating to positioning accuracies which are not disclosed how they are accomplished.

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The disclosure lacks a sufficient and enabling disclosure to support the degree of accuracy applicants claim as far as use of GPS to determine the exact position of each seed or plant. If applicants are using existing prior art equipment which would enable such accuracy, then still applicants have not disclosed which of such prior art equipment or systems are used to accomplish applicants' claimed and disclosed desired results. Also, if such are existing prior art techniques then inherently it would appear they would meet the claims. Since the positional accuracy determination of a specific crop plant, or any object for that matter, is understood to have inaccuracies for reasons even when the accuracy of a GPS is even considered to be definite, the accuracy of a specific GPS system would also not necessarily be of sufficient nature to be enabling because the particular farming components and how they cooperate with the GPS locating equipment are of critical import to enable such an accurate position determination of a seed or plant. Such reasons being that the farming equipment varies in angular position due to hills, furrows height variations, and the different parts of the farming vehicle equipment varying in position relative to the GPS measuring device. See the previously cited prior art for examples of discussions of such crop plant position accuracy problems and some solutions.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald McElheny Jr., whose telephone number is (703) 305-3894.

Fax transmissions may be directed to (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.



DONALD E. McELHENY, JR.
PRIMARY EXAMINER